

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A stopper comprising a substrate and a barrier layer, which comprises— barrier layer is formed by the application of a reactive hot melt polyurethane adhesive to the substrate.
2. (currently amended) A stopper according to Claim 1 wherein the barrier layer has a permeability to oxygen of less than about $200 \text{ cm}^3 \text{ m}^{-2} \text{ day}^{-1}$.
3. (currently amended) A stopper according to Claim 1 wherein the barrier layer has a permeability to oxygen of less than about $50 \text{ cm}^3 \text{ m}^{-2} \text{ day}^{-1}$.
4. (currently amended) A stopper according to Claim 1 wherein the barrier layer has a permeability to oxygen of less than about $30 \text{ cm}^3 \text{ m}^{-2} \text{ day}^{-1}$.
5. (currently amended) A stopper according to Claim 1 wherein the barrier layer has a permeability to oxygen of $0 \text{ cm}^3 \text{ m}^{-2} \text{ day}^{-1}$.
6. (previously presented) A stopper according to Claim 1 wherein the barrier layer has a thickness of from about 0.05 to about 100 microns.
7. (previously presented) A stopper according to Claim 1, wherein the barrier layer has a thickness of from about 0.075 to about 50 microns.
8. (previously presented) A stopper according to Claim 1, wherein the barrier layer has a thickness of from about 0.1 to about 30 microns.
9. (previously presented) A stopper according to Claim 1, wherein the polyurethane adhesive is an aliphatic polyurethane.
10. (previously presented) A stopper according to Claim 1, wherein the barrier layer includes one or more additives.

11. (original) A stopper according to Claim 10 wherein the or each additive is selected from metal oxides finely divided silicon, powdered PTFE and clays.
12. (previously presented) A stopper according to Claim 1, wherein the stopper is cylindrical in shape and has two faces located at the ends of the cylinder.
13. (canceled)
14. (previously presented) A stopper according to Claim 12 wherein the or at least one face is rounded or bevelled.
15. (previously presented) A stopper according to Claim 12 wherein the barrier layer is located at either or both of the faces.
16. (previously presented) A stopper according to Claim 12, wherein the barrier layer is located within the body of the stopper and substantially parallel to the or at least one of the faces of the stopper.
17. (previously presented) A stopper according to Claim 1, wherein the barrier layer extends across the entire face or cross-section of the stopper such that a continuous barrier is provided.
18. (previously presented) A stopper according to Claim 1, wherein the barrier layer extends across only a portion of the face or cross-section.
19. (currently amended) A stopper according to Claim 1, wherein the barrier layer extends beyond the face or cross-section of the stopper to form a gasket.
20. (previously presented) A stopper according to Claim 1, wherein the barrier layer is a composite layer comprising at least one hot melt polyurethane adhesive sub-layer and at least one sub-layer having lower oxygen permeability than the hot melt adhesive.
21. (original) A stopper according to Claim 20 wherein a hot melt polyurethane adhesive sub-layer is located against the material of the stopper.
22. (previously presented) A stopper according to Claim 20 wherein the lower oxygen permeability material is a metal foil or a vacuum deposited metal.

23. (previously presented) A stopper according to Claim 20 wherein the lower oxygen permeability material is an ethylene vinyl alcohol copolymer.
24. (previously presented) A stopper according to Claim 1, wherein the stopper is a stopper for a bottle.
25. (original) A stopper according to Claim 24 wherein the bottle is a wine bottle.
26. (previously presented) A stopper according to Claim 24 wherein the stopper is made of cork or plastics material.
27. (currently amended) A stopper according to Claim 1, wherein the barrier layer will additionally provide a barrier to microbiological contaminants.
28. (currently amended) A stopper comprising a substrate and a composite barrier layer applied to the substrate for use with a stopper, the composite barrier layer comprising formed by combining at least one reactive hot melt polyurethane adhesive sub-layer and at least one sub-layer material having lower oxygen permeability than the or each cured hot melt polyurethane adhesive sub-layer.
29. (original) A barrier layer according to Claim 28 wherein the lower oxygen permeability material is a metal foil or a vacuum deposited metal.
30. (original) A barrier layer according to Claim 28 wherein the lower oxygen permeability material is an ethylene vinyl alcohol copolymer.
31. (currently amended) A barrier layer according to Claim 28, having a permeability to oxygen of less than about $200 \text{ cm}^3 \text{ m}^{-2} \text{ day}^{-1}$.
32. (currently amended) A barrier layer according to Claim 28, having a permeability to oxygen of less than about $50 \text{ cm}^3 \text{ m}^{-2} \text{ day}^{-1}$.
33. (currently amended) A barrier layer according to Claim 28, having a permeability to oxygen of less than about $30 \text{ cm}^3 \text{ m}^{-2} \text{ day}^{-1}$.
34. (currently amended) A barrier layer according to Claim 28, having a permeability to oxygen of $0 \text{ cm}^3 \text{ m}^{-2} \text{ day}^{-1}$.

35. (currently amended) A barrier layer according to Claim 28, having a thickness of from about 0.05 to about 100 microns.
36. (currently amended) A barrier layer according to Claim 28, having a thickness of from about 0.075 to about 50 microns.
37. (currently amended) A barrier layer according to Claim 28, having a thickness of from about 0.1 to about 30 microns.
38. (currently amended) A barrier layer according to Claim 28, comprising in order: a sub-layer of a polyolefin, a sub-layer of an ethylene vinyl alcohol copolymer and a further sub-layer of a polyolefin.
39. (currently amended) A method of applying a barrier layer to a stopper comprising: forming a pre-polymer by combining an isocyanate solution with a polyol solution; applying the pre-polymer as a hot melt to a surface of the stopper; and allowing the pre-polymer to cure.
40. (original) A method of applying a barrier layer to a stopper comprising applying reactive hot melt adhesive to one of a stopper and a partially formed barrier layer; allowing the hot melt adhesive to cool; and contacting the stopper and the barrier layer such that bonding occurs.
41. (original) A method according to Claim 40 wherein the barrier layer having been applied to the stopper is held in tension and the stopper is pushed into a cup.